

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A [apparatus] <u>transistor device</u>, comprising:

a substrate having a source region, a drain region[,] and a channel region [having], in which at least one of the source, drain and channel regions has a void to [provide a barrier to lines of force to reduce leakage current] place one of the regions into a compressive or tensile stress to alter carrier mobility due to the stress; and

a gate region formed over the channel region.

- 2. (Amended) The [apparatus] <u>transistor</u> of claim 1 wherein [said] <u>the</u> void is located substantially in a center of [said] <u>the</u> channel region.
- 3. (Amended) The [apparatus] <u>transistor</u> of claim 1 wherein [said] <u>the</u> void is approximately 50 nm across.
- 4. (Amended) The [apparatus] <u>transistor</u> of claim 1 wherein [said] <u>the</u> void is located at a depth of approximately 1000 angstroms in [said] <u>the</u> channel region.
- 5. (Canceled)
- 6. (Amended) The [apparatus] <u>transistor</u> of claim [5] <u>1</u> wherein [said] <u>the voides</u> located <u>in the channel region and</u> near an edge of [said] <u>the</u> channel region adjacent to [said] <u>the</u> source region.
- 7. (Amended) The [apparatus of 6 further comprising a] <u>transistor of claim 1</u> wherein the void is located <u>in the channel region</u> near an edge of the channel region adjacent to the drain region.
- 8. (Amended) A[n apparatus] <u>transistor</u>, comprising:[a gate region; and]

a substrate having a source region[,] <u>and</u> a drain region, a channel region, and in which [and] a void <u>is located</u> below [said] <u>the</u> source region to [provide a

barrier to lines of force to reduce leakage current] <u>place one of the regions into a compressive or tensile stress to alter carrier mobility due to the stress; and a gate region above the channel region.</u>

- 9. (Amended) The [apparatus] <u>transistor</u> of claim 8 wherein a void is <u>also</u> located below [said] <u>the</u> drain region.
- 10. (Amended) The [apparatus] <u>transistor</u> of claim 9 wherein [said] the source <u>and drain</u> regions [and said drain regions] are under compressive stress.
- 11. (Amended) The [apparatus] <u>transistor</u> of claim 8 wherein [said] <u>the</u> source region is under tensile stress.
- 12. (Amended) The [apparatus] <u>transistor</u> of claim 8 wherein [said] <u>the</u> drain region is under compressive stress.
- 13. (Amended) The [apparatus] <u>transistor</u> of claim 8 wherein [said] <u>the</u> gate region is polysilicon.
- 14. (Amended) The [apparatus] <u>transistor</u> of claim 8 wherein [said] <u>the</u> gate region is metal.
- 15. (Amended) A[n apparatus] transistor comprising:

[a gate region having a void to provide a barrier to lines of force to reduce leakage current; and]

a substrate having a source region, a drain region[,] and a channel region; and

a gate region having a void to place the substrate under mechanical stress to alter carrier mobility due to the stress.

16. (Canceled)

- 17. (Amended) The [apparatus] <u>transistor</u> of claim 15 wherein [said] <u>the</u> gate region is polysilicon.
- 18. (Amended) The [apparatus] <u>transistor</u> of claim 15 wherein [said] <u>the</u> gate region is metal.